

ABSTRACT OF THE DISCLOSURE

A soft agglomerate of copper oxide ultrafine particles which has an average primary particle diameter of not more than 100 nm and an average secondary particle diameter of not less than 0.2 μm and of producing the soft agglomerate by (1) forming ultrafine copper oxide by reducing a cuprous carboxyl compound in an aqueous solution, with hydrazine and/or a hydrazine derivative, optionally with a base and optionally with organic compounds, such as alcohol (e.g., ethylene glycol or ethanol), ether, ester or amide; and simultaneously or separately applying an agglomerating force, e.g., agglomerating agent; to produce copper oxide soft agglomerate. Alternatively (2), forming a colloidal dispersion of cuprous oxide ultrafine particles by heating and reducing at least one copper compound (e.g., copper carboxyl, copper alkoxy and copper diketone compound) at a temperature of not lower than 160 °C and forming a soft agglomerate by either further heating the colloidal dispersion or by adding an agglomerating agent, e.g., monoalcohol, ether, ester, nitrite, amide and imide. Colloidal dispersions are formed by separating and redispersing the soft agglomerate. Cuprous oxide ultrafine particles are used as fillers, such as electroconductive paste and electroconductive ink, and manufacture of copper-oxide ultrafine particle colloid dispersion liquid used as inkjet ink.